Mehrdad Faraji

PhD student

EDUCATION BACKGROUND

2017 - 2020 — **MASTERS IN MATERIALS ENGINEERING**

At: Iran University of science and technology

Thesis: The Effects of thermomechanical treatment on the improvement of mechanical properties, microstructure and corrosion behavior of Al5083 alloy

2013 - 2017 — **BACHELOR IN MATERIALS ENGINEERING**

At: Hamedan University of Technology

Thesis: Investigation of anti-wear composites containing Chromium carbides

WORK EXPERIENCE

2020 - 2022 — **Research Assistant**

Hamedan University of Technology

2022 - 2023 — **Materials Engineer**

R&D section of ARAD Company

PROJECTS

- Investigation the effects of thermomechanical treatment on the microstructure and mechanical properties of AA5083 sheet (Master thesis)
- Investigation of r … omposites hard-faced using Si
- Electrochemical st
- Production … by HF electro

JMEPEG
https://doi.org/10.1007/s11665-022-07273-7

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1059-9495/$19.00

TECHNICAL ARTICLE

The Effects of Cold Rolling and Stabilization Treatment on the Improvement of Microstructure, Mechanical Properties,

Journal of Bio- and Tribo-Corrosion (2022) 8:117
https://doi.org/10.1007/s40735-022-00716-7

Materials Chemistry and Physics 313 (2024) 128755

Contents lists available at ScienceDirect

Materials Chemistry and Physics

journal homepage: www.elsevier.com/locate/matchemphys

…ffects of TiB_2 and SiC …site Coatings in 0.5 M H_2SO_4

…ezzato[3] · Irene Calliari[3] · Hossein Eskandari[2]

JMEPEG
https://doi.org/10.1007/s11665-023-07807-7

TECHNICAL ARTICLE

Investigation of … Behaviors of Com… Using SiC and TiB_2 i…

Mehrdad Faraji, Saeid Karimi, Mojtaba Esmailzadeh, and Luca Pezzato

Submitted: 14 May 2022 / Revised: 16 November 2022 / Accepted: 20 December 2022

Simultaneous improvement of mechanical strength and corrosion resistance in aluminum alloy 5083 via severe plastic deformation

Saeid Karimi[a,*], Naeimeh Fakhar[b,**], Mehrdad Faraji[c], Faramarz Fereshteh-Saniee[d]

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[b] Mechanical Engineering Department, Hamedan University of Technology, 65155-579, Hamedan, Iran
[c] School of Metallurgy and Materials Engineering, Iran University of Science and Technology (IUST), Narmak, Tehran, Iran
[d] Department of Mechanical Engineering, Faculty of Engineering, Bu-Ali Sina University, Hamedan, 65178, Iran

CERAMICS INTERNATIONAL

Production and characterization of carbide-derived-nanocarbon structures obtained by HF electrochemical etching of Ti_3AlC_2

A. Heidarpour*, M. Faraji, A. Haghighi

Department of Metallurgy and Materials Engineering, Hamedan University of Technology, Hamedan, 65155-579, Iran

PhD PROGRAM

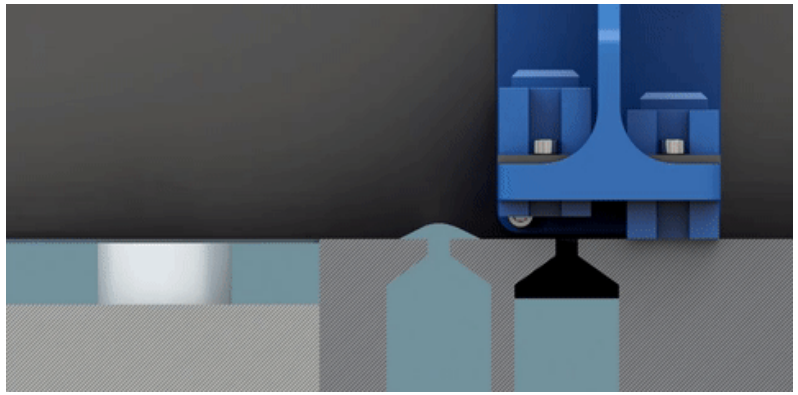
TOPIC: Corrosion of components made by additive manufacturing for extreme applications

CURRICULUM: Meccanica

HOSTING UNIVERSITY/RESEARCH CENTRE: Università degli Studi di Padova / INFN sezione di Padova

SUPERVISOR(S): Irene Calliari, Adriano Pepato

Co-Supervisor: Massimiliano Bonesso



CuCrZr Alloy

corrosion/erosion performance with the same water chemistry condition found in ITER NBTF systems and at same high velocity required (up to 12 m/s) and temperature (150 ˚C)

Ni-Based Alloy

Corrosion behavior in molten salts at the high temperature (550 ˚C)

Laser Powder Bed Fusion → **AMed Samples** → **Corrosion/ erosion evaluation**